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ABSTRACT

In 1979, Act 187, known now as the Educator Improvement Act, was mandated by the legislature of the State of South Carolina. One tenet of Act 187 was the establishment of an Educator Improvement Task Force to develop an instrument which could effectively measure minimal teaching competencies. To help in the content and design of the instrument, more than 50 state and national teacher evaluation forms were amassed, and, from these forms, 51 variables were identified as those skills essential to good teaching. The Assessments of Performance in Teaching (APT) instrument, developed from these variables, is divided into 5 performance dimensions (planning, instruction, management, communication, and attitude), each measured by means of 8 to 11 observation statements. Each teacher to be observed is first given an orientation to the APT. The teacher then prepares three model demonstrations and schedules observors to come in and evaluate those lessons using the APT, which is intended to measure minimal competency only. Because of Act 187, the role of colleges and universities has become one of preparing students to successfully complete the APT assessment during the first year of teaching. Clemson University (South Carolina) conducted a study of 112 student teachers, using the APT as the evaluation instrument, to discover whether lengthening student teaching would improve student teachers' skills and performance. Study results showed that extending a student's teaching experience would be beneficial. APT observation sheets are appended. (JMK)

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"The Length of Time Spent in Student Teaching as a Factor in Teacher Performance Evaluation at Clemson University"

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Can We Really Measure Teacher Performance Objectively?

Within the larger context of our printed topic, I would like to pose the question of whether we really can measure teacher performance objectively today. One of the major recurring concerns with which school teachers and administrators have been plagued is this issue of objective evaluation of school personnel. Administrators, who must adhere to established evaluative instruments/practices to measure performance, generally are vocal in their criticisms of "flawed" instruments or of instruments which are totally unsuitable for use in objective evaluations.

May I describe for you, very briefly, a recent important and conscientious effort made to design a suitable instrument for use in measuring teacher performance-an effort which encompassed a period of three years, cost more than a million dollars, involved literally thousands of educators, and attracted some national attention. In the process of describing, I would like to evoke from you, at the conclusion of this discussion, a cognitive response regarding the usability of this instrument as one which could be effective. I would ask you to consider its possibilities and potentialities as an "off-the-cuff," "off-the-head" response or reaction.

Background:

In 1979, Act 187, known now as the Educator Improvement Act, was mandated by the legislature of the State of South Carolina "to provide for a fair and comprehensive program for the training, certification, initial employment and evaluation of public school education." Reports from national and state-level studies indicated that the performance of students on national achievement tests was far below the average in nearly all academic areas. The fact that South Carolina children are being educated

in a public school system that ranks at close to the bottom in nearly every national comparison" (Greenville News) was reported most recently in the state's leading papers. The overall preparation and performance of many teachers in the state was also highly suspect. For these and other related reasons, Act 187 was passed.

One tenet of the six major concepts of Act 187 was the establishment of an Educator Improvement Task Force to develop an instrument which could effectively measure minimal teaching competencies. Furthermore, the task force was charged with the responsibility of producing a reliability training program for observers who would use the instrument to evaluate classroom performance. Under these provisions, every student teacher, each provisional classroom teacher, and all T and I annual contract teachers would be observed in the classroom and an assessment made of their performances, using the instrument designed for this purpose. Provisional contract teachers and T and I annual contract teachers would be required to complete the assessment program successfully before they could receive continuing contracts. Student teachers would be remediated in deficient areas.

To help in the content and design of the instrument, more than fifty (50) state and national teacher evaluation forms were amassed from systems throughout the country. From these forms, a comprehensive list of characteristics, requisite for successful teaching, was compiled. The list was sent to more than 20,000 educators in the state at every level of public schooling. Respondees were asked to identify those skills and behaviors necessary for competent teaching. The result of the survey, received from over 12,000 educators, became the basis for the final compilation to be used in the instrument. Fifty-one variables were identified as those skills essential to good teaching.

The Assessments of Performance in Teaching (APT) instrument was then divided into five performance dimensions, (PD's), with each to be measured by means of eight to eleven observation statements. A dichotomous (yes/no)

answer would indicate whether or not the teaching skill was demonstrated in the showcase lesson. The broad categories into which the instrument was divided are planning, instruction, management, communication, and attitude. This original format for the development of the instrument has not changed substantively in its evolvement, even following statewide pilot and field studies.

Procedure:

Each teacher to be observed begins the evaluation procedure with an indepth orientation to the instrument, and the assessment process. Following the orientation, three observation sessions are scheduled. Unannounced visits are not allowed; the teacher to be observed knows well in advance the dates and times of the planned visits.

Teachers prepare three model demonstrations - "showcase" lessons. A detailed lesson plan is given to the observer well in advance of the scheduled visit. After the demonstration lesson is concluded, rating sheets are prepared immediately by the observer; self-ratings are also completed by the teacher, using the same instrument. Within one week of the final observation, a conference is arranged by the evaluator of the three-person team in order to share and to compare the self-evalutions with observer evaluations. Deficiencies found are addressed with remedial possibilities advised. Those teachers who do not meet the required score initially must be provided remedial procedures carefully spelled out, and scheduled for a second set of observations later in the school year. If the required standard is not met on the second attempt, the teacher may not be employed again in the state of South Carolina.

The instrument is not designed to measure total proficiency; it is intended to measure minimal competency only. For this reason, no assumptions

are made that all of the skills required to complete the demonstration lesson successfully will ever be used again at one given time - or that they need be. The "showcase" lessons are intended to show that teachers can perform at such levels upon request. "The result will be the identification of teachers who even upon request, cannot demonstrate essential skills in teaching." (APT Instrument)

With the instrument in place, following a state-wide pilot program involving forty (40) selected school systems, an intensive training program was launched to prepare observers in the use and interpretation of the instrument. Sixty selected representatives from all levels of public education, were isolated in a remote, rural setting for an in-depth ten-day training session to insure the greatest degree of reliability and consistency possible in the administration of the APT test. Each trainee was required to meet reliability standards and to show that they were able to state in writing specific evidence proving that the observed teacher had demonstrated the required skills in the showcase lesson. Using the umbrella effect, these trained observers were remanded to return to their respective systems to train other qualified personnel in the use of the instrument. This was done within the span of one year and today most systems in the state will not allow student teachers to work with supervisors who have not completed APT reliability training. In the fall of 1982, the state began using the instrument in employment practices.

Results:

In 1982, the APT Standard Setting Committee recommended a score of forty-two (42) as the lowest acceptable level of performance on the fifty-one (51) item test. The State Board of Education adjusted the score from forty-two (42) upward to forty-four (44) which represents an adjustment of 1.64 standard errors of measurement.

Performance data received for 1,282 first-year teachers tested in 1982 showed an average mean score of 46.88 on the APT instrument.

Of 3,856 teachers trained to be observers in 1982-83, 3,527 or 91% of them received passing scores.

Based on the current standard of forty-four (44) as a passing score, 90.5 percent of first-year teachers observed in the fall of 1982-83 would have been eligible to be hired as continuing contract teachers.

Because of some difficulty with objectivity in scoring, all observer tests are now scored by highly trained experts in the State Department.

From inception to implementation, the APT program has been studiously considered, pilot tested, re-evaluated, field tested, and refined at carefully selected stages of development. "Through concurrent and construct validation and through data analysis of pilot and field study tests for objectivity, reliability and validity the instrument has been developed." (APT Instrument) Item analyses were made of each variable on the test to determine difficulty and discrimination values. Nationally recognized linguistic experts were brought in to free the tests of all language bias. Studies were conducted to determine observation differences related to the types of observers. All-in-all, a very comprehensive, conscientious effort was made to develop an instrument which would measure objectively teacher performance - and yet the questions persists - "Are we really measuring objectively?"

We would like for you now to see a portion of the training tapes used in orientation sessions and to score, if you like, Performance Dimension 5. This tape shows a student teacher at work in a fourth grade math class. PD5 is the dimension which has been most difficult for our students. Please circle the letter in the box at the end of the statement, if you

give credit for the skill; "x" the letter if you deny credit.

And now the tape!

I have presented background information concerning the development of the APT instrument. Dr. Buckner will now address the length of time spent in student teaching as a factor in evaluation, a study which used this instrument to measure student teacher performance.

The Length of Time Spent in Student Teaching as a Factor in Student Teacher Performance Evaluations

Rationale

For the past few years, the concept of extending the time spent in student teaching has created interest, discussion and professional activity in many states. Several factors other than laws and accreditation standards have contributed to the impetus to extend the student teaching experience. Recent research on the nature of teaching has resulted in the description of teaching in terms of performance competencies. Educational trends such as behavioral objectives, individualization, accountability, and criterion referenced evaluations have supported the concept of expanding performance based student teaching.

The assumption has been made that lengthening the time spent in student teaching will make the teacher preparation program more effective and meaningful to college students as well as provide a more realistic career orientation for them. Very few researchers have ever addressed specifically the question: Does lengthening student teaching to nine weeks, twelve weeks, or a full semester improve a student teacher's performance?

A handout has been prepared for you which gives references in the literature on this topic - we note that there is little hard evidence that would indicate specifically what is a "reasonable time" for student teaching.

The purpose of this study was to discover whether or not lengthening student teaching will improve the skills and performance of student teachers. Data from such studies may be useful to professionals interested in lengthening student teaching, and such research efforts may also provide information to satisfy the public's increased demands for accountability as well as serve as a basis for a rational decision-making process on the part of accreditation and governmental agencies.

The study was concerned with all student teachers enrolled at Clemson University during the Spring semester of 1983. At approximately the third week, sixth week and ninth week, 112 participants were observed for skills and performance by means of the Assessments of Performance in Teaching (APT Instrument), developed by the South Carolina Educator Improvement Task Force.

Analysis of Data

The question to be answered by the study was: Does extending the time span improve the teaching skills and behavior ratings of student teachers? The hypothesis under investigation was as follows: There will be no significant differences between the APT scores of student teachers involved in this study. An .05 level of confidence was considered to be significant for the purpose of this study.

Analysis of variance procedure was used to analyze the data and to test the hypothesis under consideration. Table 1 presents the means, the sum of the squares, mean squares and F value. A comparison of week three and week six scores was found to be not significant. A comparison of week six and week nine scores is significant at the .01 level indicating that a change in student teaching performance took place. A comparison of week three and week nine scores was also significant at the .01 level.

Except for the week three and week six comparison, the null hypothesis was rejected at the .01 level of significance. It was concluded that these student teachers had gained significantly in their teaching competence from the third through the ninth week and that most of the change took place from the sixth to the ninth week.

Summary

It is believed that this study provides evidence to extend the student teaching experience.

In terms of the group studies, it was noted that the student teachers' initial scores placed them above the minimum competent beginning teacher level. Their gains by the ninth week reflect an improvement upon an already competent performance. The findings reported here indicated that even a greater performance change over a more extended period of time may be predicted. It is believed by the authors that these results lend support to the idea of extending the period of time of student teaching and other field experience.

An addition to this study should recommend continuing research using the APT instrument over a twelve or fifteen week time period.

In view of the findings cited in the literature, it would seem appropriate to further investigate the length of time spent in student teaching as a factor affecting the performance of student teachers in the classroom.

Teacher Certification

Act #187, The Educator Improvement Act, of the 1979 South Carolina General Assembly is one of the most comprehensive pieces of legislation in teacher education to be enacted in recent years and is only a part of continuing effort to improve education in South Carolina. At the present

time, Governor Richard Riley is sponsoring a $210 million plan for school improvement. This plan includes specific recommendations in the following areas:

1. Raise student performance by increasing academic standard
2. Strengthen the teaching and testing of basic skills
3. Elevate the teaching profession
4. Improve leadership, management, and fiscal efficiency
5. Guarantee results and provide accountability
6. Create more effective partnerships between schools-parents-community-business
7. Provide school buildings conducive to improved student learning
8. Provide financial support needed to improve South Carolina schools

The regulations for the implementation of Act #187 of 1979 requires the following actions:

1. Successful completion of a basic skill entrance examination (EEE) is required by every student for final admittance into an undergraduate teacher education program.
2. Successful completion of certification area examinations. The specific teaching area examinations of the National Teacher Examinations or the South Carolina Teaching Area Examinations are used for certification purposes.
3. Successful completion of one semester (60 full days) of student teaching.
4. Each student teacher shall be evaluated at least three times using the APT instrument by a representative of the college or university in which the student teacher is enrolled.
5. Successful completion of one year as a provisional contract teacher. Provisional contract teachers will need to complete the APT assessment successfully for reemployment.

Because of Act #187, the role of colleges and universities has become one of preparing students to successfully complete the APT assessment during the first year of teaching. No criteria has been established for passing the APT during student teaching. It is used as "an instrument for assistance, training and counseling to the student teacher to overcome identified deficiencies."

At Clemson University four to five additional evaluations are done each semester using an instrument modeled after the APT. Each student teacher's file must contain APT evaluations, Clemson University evaluations,

Basic Skills Entrance Examination (EEE) scores, and a record of attendance in student teaching. A completed file is necessary for certification and must be checked before a recommendation for certification is given.

Because Act #187 was implemented in 1983, no substantial data has been collected. However, Clemson students have been very successful during this first year. A high percentage of student teachers have reached the criteria established for first year teachers. Scholastic Aptitude Test Scores at Clemson are above the national average for education majors and to date one-hundred percent (228) of entering students have passed the basic skills entrance examination (EEE). Therefore, these results might not generalize to other colleges and universities.

Two potential problems have become apparent during the first year of use of the APT.

First, because the law calls for sixty full days of student teaching and only calls for three evaluations using the APT, it might be possible for a student teacher to score high on the APT but not complete student teaching because of inadequate attendance.

Second, the observer training, observation time and paperwork required by the APT have placed additional responsibilities and expense upon public schools and colleges of education. Because of this, placement of student teachers has become more difficult.

Implementation of Act #187 generally has had a positive effect on teacher education in South Carolina. It has provided for program review, analysis of teaching skills and systematic assessment of beginning teacher.

APPENDIX

APT Observation Sheet

References

APT OBSERVATION SHEET

Evaluation Completed by: (Check one and complete all sections of form.)
☐ 1. Observer
☐ 2. Teacher Self-Observation

Directions: Use leading zero's for coding single digit numbers. For example code "2" as "02."

Teacher Observed

(Last Name) (First Name) (MI) Social Security No.

Observer

(Last Name) (First Name) (MI) Social Security No.

Demonstration Lesson

Observation Date: Mo. Day Year

Actual Starting Time: :

Actual Ending Time: :

Class Size Observed:

Subject Area Observed: _____

Grade Level(s) Observed: (Code as many grade levels as in class observed. Use "K" for Kindergarten.)

Scores

PD1: PD2: PD3: PD4: PD5: TOTAL:

Directions: Use the *Assessments of Performance in Teaching: Observation Instrument* (APT Instrument) to complete this sheet. After reading the Planning Sheet and examining records (for PD 1) or observing the teaching demonstration (for PD 2-5), write brief statement of evidence or lack of evidence after each observation. Then circle the letter in the column on the right if the skill or behavior was demonstrated or place an X over the letter if evidence did not support the demonstration. All observations must be scored. Write the total number of observation statements demonstrated for each Performance Dimension (PD) in the blanks above.

Observation	Evidence	Demonstration

PD 1: PLANNING

a. outcomes stated	a.
b. objectives compatible	b.
c. procedures stated	c.
d. students involved	d.
e. materials stated	e.
f. differences planned	f.
g. objectives assessed	g.
h. progress recorded	h.

PD 2: INSTRUCTION

a. began promptly	a.
b. objectives addressed	b.
c. needs accommodated	c.
d. interest stimulated	d.
e. approaches varied	e.
f. size varied	f.
g. active opportunities	g.
h. application opportunities	h.
i. information obtained	i.
j. progress provided	j.
k. physical arrangement	k.

PD 3: MANAGEMENT

a. behavior established	a.
b. firm enforcement	b.
c. procedural confidence	c.
d. instruction continued	d.

PD 3: continued

e. disruptions addressed	e.
f. codes enforced	f.
g. inattentive involved	g.
h. special assistance	h.
i. strategies adjusted	i.
j. patient, poised	j.
k. fair, impartial	k.

PD 4: COMMUNICATION

a. instructional plan	a.
b. logical sequence	b.
c. understandable level	c.
d. explanations restated	d.
e. illustrations demonstrated	e.
f. knowledgeable authority	f.
g. information accurate	g.
h. legible writing	h.

PD 4: continued

i. written communication	i.
j. oral communication	j.
k. speech quality	k.

PD 5: ATTITUDE

a. courtesy modeled	a.
b. positive reinforcement	b.
c. expression encouraged	c.
d. learning personalized	d.
e. supportive corrections	e.
f. reasons given	f.
g. value communicated	g.
h. enthusiasm communicated	h.
i. open-mindedness	i.
j. humor acknowledged	j.

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TABLE I

STUDENT TEACHER SCORES
COMPARISON OF WEEK 5 AND WEEK 6 SCORES

ANALYSIS OF VARIANCE PROCEDURE
(n=112)

DEPENDENT VARIABLE: SCORE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	0.01785714	0.01785714	0.00	0.9668	0.000008	6.7455
ERROR	222	2279.96428571	10.27010940		ROOT MSE		SCORE MEAN
CORRECTED TOTAL	223	2279.98214286			3.20470114		47.50892857

SOURCE	DF	ANOVA SS	F VALUE	PR > F
WEEK	1	0.01785714	0.00	0.9668

STUDENT TEACHER SCORES
COMPARISON OF WEEK 6 AND WEEK 9 SCORES

ANALYSIS OF VARIANCE PROCEDURE
(n=112)

DEPENDENT VARIABLE: SCORE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	68.64285714	68.64285714	8.15	0.0047	0.035431	6.0377
ERROR	222	1868.71428571	8.41763192		ROOT MSE		SCORE MEAN
CORRECTED TOTAL	223	1937.35714286			2.90131555		48.05357143

SOURCE	DF	ANOVA SS	F VALUE	PR > F
WEEK	1	68.64285714	8.15	0.0047

(Table I continued)

STUDENT TEACHER SCORES
COMPARISON OF WEEK 3 AND WEEK 9 SCORES
ANALYSIS OF VARIANCE PROCEDURE
(n=112)

DEPENDENT VARIABLE: SCORE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PR > F	R-SQUARE	C.V.
MODEL	1	66.44642857	66.44642857	7.73	0.0059	0.033642	6.1008
ERROR	222	1908.67857143	8.59765122		ROOT MSE		SCORE MEAN
CORRECTED TOTAL	223	1975.12500000			2.93217517		48.06250000

SOURCE	DF	ANOVA SS	F VALUE	PR > F
WEEK	1	66.44642857	7.73	0.0059